WHAT IS CLAIMED AS NEW AND DESIRED TO BE PROTECTED BY LETTERS PATENT OF THE UNITED STATES OF AMERICA, IS:

1. A system for measuring the thickness dimension of an article being conveyed along a predetermined conveyor path, wherein the article has a predetermined substantially constant, relatively large thickness dimension and a predetermined length dimension, comprising:

an article conveyor for conveying a plurality of articles along a predetermined conveyor path, wherein each one of the conveyed articles has a predetermined substantially constant, relatively large thickness dimension and a predetermined length dimension;

a mounting bracket;

a rotary encoder mounted upon said mounting bracket and comprising a rotary shaft;

a lever arm movably mounted upon said rotary shaft of said rotary encoder and having a first end portion thereof disposed in contact with said article conveyor so as to operatively engage each one of the articles being conveyed along said predetermined conveyor path by said article conveyor, whereupon said first end portion of said lever arm encountering an article, which is being conveyed along said predetermined conveyor path by said article conveyor and which has a predetermined substantially constant, relatively large thickness dimension and a predetermined length dimension, said lever arm will repetitively move away from and back toward said article conveyor, as the article is conveyed along said predetermined conveyor path by said article conveyor, between first positions which are indicative of

first false positive thickness dimensions of the article being conveyed along said predetermined conveyor path by said article conveyor, and a second position which is indicative of a second true predetermined substantially constant, relatively large thickness dimension of the article being conveyed along said predetermined conveyor path by said article conveyor, as determined by corresponding rotations of said rotary shaft of said rotary encoder wherein said rotary encoder will emit correlated thickness dimension data as a function of the length of the article being conveyed along said predetermined conveyor path by said article conveyor; and

means for determining the second true thickness dimension of the article being conveyed along said predetermined conveyor path by said article conveyor by effectively eliminating the first false positive thickness dimensions of the article being conveyed along said predetermined conveyor path by said article conveyor.

2. The system as set forth in Claim 1, wherein said means for determining the true thickness dimension of the article being conveyed along said predetermined conveyor path by said article conveyor, comprises:

sensor means for predetermining the length dimension of each article being conveyed along said predetermined conveyor path by said article conveyor; and

central processing means (CPU), operatively connected to said rotary encoder, for determining the first and second thickness dimensions of each article being conveyed

along said predetermined conveyor path by said article conveyor as a function of the predetermined length dimension of each article being conveyed along said predetermined conveyor path by said article conveyor.

3. The system as set forth in Claim 2, wherein:

said central processing unit (CPU) comprises program means for detecting repetitive substantially similar second thickness dimension values and which can ignore variable first thickness dimension values.

4. The system as set forth in Claim 3, wherein:

said program means of said central processing unit (CPU) can determine a locus, from said repetitive substantially similar second thickness dimension values, which is indicative of the second true thickness dimension of the article being conveyed along said predetermined conveyor path by said article conveyor.

5. The system as set forth in Claim 1, wherein:

said first positions, to which said lever arm is moved so as to indicate the first false positive thickness dimensions of the article being conveyed along said predetermined conveyor path by said article conveyor, are located more remote from said article conveyor than said second po-

sition to which said lever arm is moved so as to indicate the second true predetermined substantially constant, relatively large thickness dimension of the article being conveyed along said predetermined conveyor path by said article conveyor.

6. A conveyor system for depositing a predetermined number of articles, having a predetermined cumulative thickness dimension, into a storage bin having a predetermined storage capacity, comprising:

a storage bin having a predetermined storage capacity for accommodating therein a predetermined number of articles having a predetermined cumulative thickness dimension such that the predetermined number of articles can be stored within said storage bin;

an article conveyor for conveying a plurality of articles along a predetermined conveyor path toward said storage bin, wherein each one of the conveyed articles has a predetermined substantially constant, relatively large thickness dimension and a predetermined length dimension;

a mounting bracket;

a rotary encoder mounted upon said mounting bracket and comprising a rotary shaft;

a lever arm movably mounted upon said rotary shaft of said rotary encoder and having a first end portion thereof disposed in contact with said article conveyor so as to operatively engage each one of the articles being conveyed along said predetermined conveyor path by said article conveyor, whereupon said first end portion of said lever arm

encountering an article, which is being conveyed along said predetermined conveyor path by said article conveyor and which has a predetermined substantially constant, relatively large thickness dimension and a predetermined length dimension, said lever arm will repetitively move away from and back toward said article conveyor, as the article is conveyed along said predetermined conveyor path by said article conveyor, between first positions which are indicative of first false positive thickness dimensions of the article being conveyed along said predetermined conveyor path by said article conveyor, and a second position which is indicative of a second true predetermined substantially constant, relatively large thickness dimension of the article being conveyed along said predetermined conveyor path by said article conveyor, as determined by corresponding rotations of said rotary shaft of said rotary encoder wherein said rotary encoder will emit correlated thickness dimension data as a function of the length of the article being conveyed along said predetermined conveyor path by said article conveyor;

means for determining the second true thickness dimension of the article being conveyed along said predetermined conveyor path by said article conveyor by effectively eliminating the first false positive thickness dimensions of the article being conveyed along said predetermined conveyor path by said article conveyor; and

means operatively connected to said article conveyor for correlating said second true thickness dimension data of each article being conveyed along said predetermined conveyor path by said article conveyor with said predetermined storage capacity of said storage bin such that when the cumulative second true thickness dimension of a plural-

ity of articles being conveyed along said predetermined conveyor path by said article conveyor, as indicated by said thickness dimension data emitted by said rotary encoder, comprises a predetermined value with respect to said storage capacity of said storage bin, operation of said article conveyor will be terminated so as not to deposit any additional articles into said storage bin.

7. The system as set forth in Claim 6, wherein:

said means operatively connected to said article conveyor comprises a central processing unit (CPU).

8. The system as set forth in Claim 7, further comprising:

reader means for reading indicia upon each one of the articles being conveyed along said predetermined conveyor path by said article conveyor and for transmitting said read indicia to said central processing unit (CPU) such that said central processing unit (CPU) is enabled to track each individual article being conveyed along said predetermined conveyor path by said article conveyor.

9. The system as set forth in Claim 8, wherein:

said central processing unit (CPU) has stored therein said predetermined storage capacity of said storage bin so as to be able to correlate said storage capacity of

said storage bin with the cumulative thickness dimension data of the plurality of articles being conveyed along said predetermined conveyor path by said article conveyor.

10. The system as set forth in Claim 8, wherein:

said reader means comprises a reader selected from the group comprising a bar code reader and an optical character recognition reader.

11. A system for measuring the thickness dimension of an article being conveyed along a predetermined conveyor path, wherein the article has a variable thickness dimension along its longitudinal extent defining a predetermined length dimension, comprising:

an article conveyor for conveying a plurality of articles along a predetermined conveyor path, wherein each one of the conveyed articles has a variable thickness dimension along its longitudinal extent defining a predetermined length dimension;

a mounting bracket;

a rotary encoder mounted upon said mounting bracket and comprising a rotary shaft;

a lever arm movably mounted upon said rotary shaft of said rotary encoder and having a first end portion thereof disposed in contact with said article conveyor so as to operatively engage each one of the articles being conveyed along said predetermined conveyor path by said article con-

veyor, whereupon said first end portion of said lever arm encountering an article, which is being conveyed along said predetermined conveyor path by said article conveyor and which has a variable thickness dimension along its longitudinal extent defining a predetermined length dimension, said lever arm will move in a variable manner with respect to said article conveyor, as the article is conveyed along said predetermined conveyor path by said article conveyor, between a plurality of different positions which are indicative of a plurality of different thickness dimensions of the article being conveyed along said predetermined conveyor path by said article conveyor, as determined by corresponding rotations of said rotary shaft of said rotary encoder wherein said rotary encoder will emit correlated thickness dimension data as a function of the length of the article being conveyed along said predetermined conveyor path by said article conveyor; and

means for determining an average thickness dimension of the article being conveyed along said predetermined conveyor path by said article conveyor from said plurality of different thickness dimensions as generated from said thickness dimension data by said rotary encoder.

12. The system as set forth in Claim 11, wherein said means for determining the average thickness dimension of the article being conveyed along said predetermined conveyor path by said article conveyor, comprises:

sensor means for predetermining the length dimension of each article being conveyed along said predetermined

conveyor path by said article conveyor; and

central processing means (CPU), operatively connected to said rotary encoder, for determining the plurality of thickness dimensions of each article being conveyed along said predetermined conveyor path by said article conveyor as a function of the predetermined length dimension of each article being conveyed along said predetermined conveyor path by said article conveyor.

13. The system as set forth in Claim 12, wherein:

said central processing unit (CPU) comprises program means for detecting said plurality of different thickness dimension values and for averaging said plurality of different thickness dimension values.

14. The system as set forth in Claim 13, wherein:

said program means of said central processing unit (CPU) can determine a locus, from said plurality of different thickness dimension values, which is indicative of the average thickness dimension of the article being conveyed along said predetermined conveyor path by said article conveyor.

15. A conveyor system for depositing a predetermined number of articles, having a predetermined cumulative thickness di-

mension, into a storage bin having a predetermined storage capacity, comprising:

a storage bin having a predetermined storage capacity for accommodating therein a predetermined number of articles having a predetermined cumulative thickness dimension such that the predetermined number of articles can be stored within said storage bin;

an article conveyor for conveying a plurality of articles along a predetermined conveyor path toward said storage bin, wherein each one of the conveyed articles has a variable thickness dimension along its longitudinal extent defining a predetermined length dimension;

a mounting bracket;

a rotary encoder mounted upon said mounting bracket and comprising a rotary shaft;

a lever arm movably mounted upon said rotary shaft of said rotary encoder and having a first end portion thereof disposed in contact with said article conveyor so as to operatively engage each one of the articles being conveyed along said predetermined conveyor path by said article conveyor, whereupon said first end portion of said lever arm encountering an article, which is being conveyed along said predetermined conveyor path by said article conveyor and which has a variable thickness dimension along its longitudinal extent defining a predetermined length dimension, said lever arm will move in a variable manner with respect to said article conveyor, as the article is conveyed along said predetermined conveyor path by said article conveyor, between a plurality of different positions which are indicative of a plurality of different thickness dimensions of the article being conveyed along said predetermined conveyor

path by said article conveyor, as determined by corresponding rotations of said rotary shaft of said rotary encoder wherein said rotary encoder will emit correlated thickness dimension data as a function of the length of the article being conveyed along said predetermined conveyor path by said article conveyor;

means for determining an average thickness dimension of the article being conveyed along said predetermined conveyor path by said article conveyor from said plurality of different thickness dimensions as generated from said thickness dimension data by said rotary encoder; and

means operatively connected to said article conveyor for correlating said average thickness dimension data of each article being conveyed along said predetermined conveyor path by said article conveyor with said predetermined storage capacity of said storage bin such that when the cumulative average thickness dimension of the plurality of articles being conveyed along said predetermined conveyor path by said article conveyor, as indicated by said thickness dimension data emitted by said rotary encoder, comprises a predetermined value with respect to said storage capacity of said storage bin, operation of said article conveyor will be terminated so as not to deposit any additional articles into said storage bin.

16. The system as set forth in Claim 15, wherein:

said means operatively connected to said article conveyor comprises a central processing unit (CPU).

17. The system as set forth in Claim 16, further comprising:

reader means for reading indicia upon each one of the articles being conveyed along said predetermined conveyor path by said article conveyor and for transmitting said read indicia to said central processing unit (CPU) such that said central processing unit (CPU) is enabled to track each individual article being conveyed along said predetermined conveyor path by said article conveyor.

18. The system as set forth in Claim 17, wherein:

said central processing unit (CPU) has stored therein said predetermined storage capacity of said storage bin so as to be able to correlate said storage capacity of said storage bin with the cumulative thickness dimension data of the plurality of articles being conveyed along said predetermined conveyor path by said article conveyor.

19. The system as set forth in Claim 17, wherein:

said reader means comprises a reader selected from the group comprising a bar code reader and an optical character recognition reader.

20. A method for depositing a predetermined number of articles, having a predetermined cumulative thickness dimension,

into a storage bin having a predetermined storage capacity, comprising:

providing a storage bin having a predetermined storage capacity for accommodating therein a predetermined number of articles having a predetermined cumulative thickness dimension such that the predetermined number of articles can be stored within said storage bin;

providing an article conveyor for conveying a plurality of articles along a predetermined conveyor path toward said storage bin, wherein each one of the conveyed articles has a predetermined, substantially constant, realtively large thickness dimension and a predetermined length dimension;

positioning a rotary encoder, having a rotary shaft, adjacent to said article conveyor;

movably mounting a lever arm upon said rotary shaft of said rotary encoder wherein a first end portion of said lever arm is disposed in contact with said article conveyor so as to operatively engage each one of the articles being conveyed along said predetermined conveyor path by said article conveyor, whereupon said first end portion of said lever arm encountering an article, which is being conveyed along said predetermined conveyor path by said article conveyor and which has a predetermined substantially constant, relatively large thickness dimension and a predetermined length dimension, said lever arm will repetitively move away from and back toward said article conveyor, as the article is conveyed along said predetermined conveyor path by said article conveyor, between first positions which are indicative of first false positive thickness dimensions of the article being conveyed along said predetermined conveyor

path by said article conveyor, and a second position which is indicative of a second true predetermined substantially constant, relatively large thickness dimension of the article being conveyed along said predetermined conveyor path by said article conveyor, as determined by corresponding rotations of said rotary shaft of said rotary encoder wherein said rotary encoder will emit correlated thickness dimension data as a function of the length of the article being conveyed along said predetermined conveyor path by said article conveyor;

providing means for determining the second true thickness dimension of each article being conveyed along said predetermined conveyor path by said article conveyor by effectively eliminating the first false positive thickness dimensions of each article being conveyed along said predetermined conveyor path by said article conveyor;

providing means for correlating said second true thickness dimension data of each article being conveyed along said predetermined conveyor path by said article conveyor with said predetermined storage capacity of said storage bin; and

controlling the operation of said article conveyor in such a manner that when the cumulative thickness dimension of a plurality of articles being conveyed along said predetermined conveyor path of said article conveyor, as indicated by said thickness dimension data emitted by said rotary encoder and comprising said second true thickness dimensions, comprises a predetermined value with respect to said storage capacity of said storage bin, operation of said article conveyor will be terminated so as not to deposit any additional articles into said storage bin.

21. The method as set forth in Claim 20, wherein:

said steps of determining the second true thickness dimension of each article being conveyed along said predetermined conveyor path by said article conveyor, correlating said second true thickness dimension data with said storage capacity of said storage bin, and controlling the operation of said article conveyor, are performed by a central processing unit (CPU).

22. The method as set forth in Claim 21, further comprising the step of:

providing reader means for reading indicia upon each one of the articles being conveyed along said predetermined conveyor path by said article conveyor and for transmitting said read indicia to said central processing unit (CPU) such that said central processing unit (CPU) is enabled to track each individual article being conveyed along said predetermined conveyor path by said article conveyor.

23. The method as set forth in Claim 22, wherein:

said step of correlating said storage capacity of said storage bin with the cumulative thickness dimension data of the plurality of articles being conveyed along said predetermined conveyor path by said article conveyor comprises the step of storing said predetermined storage capacity of said storage bin within said central processing unit (CPU).

24. A method for depositing a predetermined number of articles, having a predetermined cumulative thickness dimension, into a storage bin having a predetermined storage capacity, comprising:

providing a storage bin having a predetermined storage capacity for accommodating therein a predetermined number of articles having a predetermined cumulative thickness dimension such that the predetermined number of articles can be stored within said storage bin;

providing an article conveyor for conveying a plurality of articles along a predetermined conveyor path toward said storage bin, wherein each one of the conveyed articles has a variable thickness dimension along its longitudinal extent defining a predetermined length dimension;

positioning a rotary encoder, having a rotary shaft, adjacent to said article conveyor;

movably mounting a lever arm upon said rotary shaft of said rotary encoder wherein a first end portion of said lever arm is disposed in contact with said article conveyor so as to operatively engage each one of the articles being conveyed along said predetermined conveyor path by said article conveyor, whereupon said first end portion of said lever arm encountering an article, which is being conveyed along said predetermined conveyor path by said article conveyor and which has a variable thickness dimension along its longitudinal extent defining a predetermined length dimension, said lever arm will move in a variable manner with respect to said article conveyor, as the article is conveyed along said predetermined conveyor path by said article conveyor, between a plurality of different positions which are indicative of a plurality of different thickness dimensions

of the article being conveyed along said predetermined conveyor path by said article conveyor, as determined by corresponding rotations of said rotary shaft of said rotary encoder wherein said rotary encoder will emit correlated thickness dimension data as a function of the length of the article being conveyed along said predetermined conveyor path by said article conveyor;

providing means for determining the average thickness dimension of each article being conveyed along said predetermined conveyor path by said article conveyor from said plurality of different thickness dimensions as generated from said thickness dimension data by said rotary encoder;

providing means for correlating said average thickness dimension data of each article being conveyed along said predetermined conveyor path by said article conveyor with said predetermined storage capacity of said storage bin; and

controlling the operation of said article conveyor in such a manner that when the cumulative thickness dimension of a plurality of articles being conveyed along said predetermined conveyor path of said article conveyor, as indicated by said thickness dimension data emitted by said rotary encoder and comprising said average thickness dimensions, comprises a predetermined value with respect to said storage capacity of said storage bin, operation of said article conveyor will be terminated so as not to deposit any additional articles into said storage bin.

25. The method as set forth in Claim 24, wherein:

said steps of determining the average thickness dimension of each article being conveyed along said predetermined conveyor path by said article conveyor, correlating said average thickness dimension data with said storage capacity of said storage bin, and controlling the operation of said article conveyor, are performed by a central processing unit (CPU).

26. The method as set forth in Claim 25, further comprising the step of:

providing reader means for reading indicia upon each one of the articles being conveyed along said predetermined conveyor path by said article conveyor and for transmitting said read indicia to said central processing unit (CPU) such that said central processing unit (CPU) is enabled to track each individual article being conveyed along said predetermined conveyor path by said article conveyor.

27. The method as set forth in Claim 26, wherein:

said step of correlating said storage capacity of said storage bin with the cumulative thickness dimension data of the plurality of articles being conveyed along said predetermined conveyor path by said article conveyor comprises the step of storing said predetermined storage capacity of said storage bin within said central processing unit (CPU).